SYNOPSIS

ON

DRIVERS AND CONSEQUENTS OF ENTREPRENEURIAL SELF-EFFICACY OF GRASS-ROOTS INNOVATORS: A STUDY OF NORTHERN AND WESTERN REGION OF INDIA

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SECTION I:

Introduction

Economic development and entrepreneurship make synergistic contribution to new wealth and employment creation and bring about socio-economic change as a consequence. Traditionally, entrepreneurs are often those individuals who start their own new and small business, bring in new business models or innovate. Innovation is characterised by the application of new or improved solutions to provide better solutions to consumer needs that lead to enhanced satisfaction. It is the key concept that differentiates the new entrepreneurs from the traditional ones.

Grass-roots innovation is a diverse set of activities in which networks of neighbours, community groups and activists work with people with three objectives:

i. To generate bottom-up solutions for sustainable developments;

ii. To provide novel solutions that respond to the local situation and the interests and values of the communities involved; and

iii. To ensure that those communities have control over the processes and outcomes. With its unique demographic advantage, India has the potential for, and it must, nurture entrepreneurial mind-set and create support infrastructure for mass entrepreneurship speedily to abate job crisis.

Socio-psycho perspective of entrepreneurship research reviews entrepreneurial mind-sets. This paradigm asserts that complexly determined entrepreneurial behaviours require research models to suggest significant processes that affect entrepreneurial behaviour of individuals. Self-efficacy is one such significant variable that entails belief mechanism related to entrepreneurial behaviour. This proposed research is an attempt to explore relevant variables of entrepreneurial self-efficacy of Indian grass-roots innovators. The research will help in developing an understanding of how grass-roots innovators decide to engage in entrepreneurial behaviour.

SECTION II:

Review of Literature and Identification of Research Gaps

2.1. Entrepreneurial self-efficacy

Entrepreneurial Self-efficacy is defined as a person's belief in his or her capability to carry out a task

(Bird 1988) and has a significant influence on the process of development of entrepreneurial intention. Drnovšek et al. (2010) found that self-efficacy helps in encouraging positive thoughts and controlling negative thoughts that are relevant to business start-ups.

Chen et al. (1998) conducted a study of entrepreneurial self-efficacy (ESE) by developing constructs such as marketing, innovation, management, risk taking and financial control.

Market entrepreneurial self-efficacy helps in setting market share goals, meeting sales goals, attaining profit goals, establishing position in product market, conducting market analysis, and helps in expand business. Innovation entrepreneurial self-efficacy helps in developing new ventures and new ideas, new products and services, analyzing new markets and geographic territories for venture creation and developing new methods of production, marketing, and management. Management entrepreneurial self-efficacy helps in reducing risk and uncertainty, creating strategic planning and developing information system, managing time to set goals, establishing and achieving goals and objectives, and defining the organizational roles, responsibilities, and policies. Risk taking entrepreneurial self-efficacy calculate risks, make decisions under uncertainty and risk, take responsibility for ideas and decisions and measure work under pressure and conflict. Financial control entrepreneurial self-efficacy perform financial analysis, develop financial system and internal controls and control cost (Cumberland et al. 2015).

One of the most significant findings was that innovation and risk-taking appeared to be important cognitive capabilities in the Entrepreneurial self-efficacy. Krueger et al. (2000) found that individuals with high self-efficacy are more willing to make an effort to overcome obstacles in business ventures. Similarly, Nuepert et al. (2004) found that self-efficacy is a significant contributing factor to start one's business. Chandler et al. (1992) found that abilities such as recognizing opportunities and driving the business venture are critical in the entrepreneurial process.

The theoretical underpinnings of predictors of entrepreneurial self-efficacy are explained by social cognitive theory (Bandura 1997).An individual's interactions with internal and external environment, social context, observation, social persuasion (BarNir et al. 2011), mastery experiences (Lee et al. 2016), vicarious learnings from role models/mentors (Laviolette et al. 2012), work experience (Farashah 2015) and judgement of individual's own physiological state build and foster self-efficacy

beliefs (Newman et al. 2019).Some additional significant drivers of entrepreneurial self-efficacy are individual differences such as gender (Dempsey and Jennings 2014), education and training (Kubberod and Pettersen 2017), teaching methods (Abaho et al. 2015), risk-taking preferences (Zhao et al. 2005; Zhang and Cain 2017), cognitive styles (Barbosa et al. 2007), family background (Tolentino et al. 2014), and personality traits like need for achievement, locus of control (Luthans and Ibrayeva 2007) and conscientiousness (Otto, Glaser, and Dalbert 2009).

Following discussion narrates key drivers of entrepreneurial self-efficacy among grass-roots innovators.

2.2. Antecedents of Entrepreneurial Self-efficacy of grass-roots innovators:-

This sub-section gives a brief description of a few identified antecedents of entrepreneurial self-efficacy namely, mentoring, entrepreneurial experience and personality traits:

2.2.1. Mentoring

Chelsea (2018) found that mentoring may be a vital component of success since there was an increase in self-efficacy and sense of belonging. According to Hinney and Haas (2003), students who had a higher sense of self-efficacy were able to cope more successfully than students who had a lower sense of self-efficacy Students who may have a better sense of time management may feel more capable in completing tasks or assignments in the collegiate setting, granting the student a higher sense of self-efficacy. According to Craig (2018), mentoring that follows constructivist rather than transmitted principles" encourages the self-efficacy of mentees. Richter et al. (2013); Lejonberg and Tiplic (2016) presented results which indicated that reflection-based mentoring did not contribute to mentees' self-efficacy as teachers. Mentoring facilitates positive self-efficacy. Individuals with high self-efficacy emulate professional resiliency and possess a strong sense of optimism in their ability to adapt, overcome, and persevere in the professional arena (Jnah and Robinson 2015).

2.2.2. Entrepreneurial Experience

The experience gained from business start-ups enables entrepreneurs to identify new opportunities for new venture creation, hence leading to multiple venture start-ups and developing an "entrepreneurial career" (Farashah 2015; Hockerts 2017; Pfeifer et al 2016). However, the extent to which the

entrepreneurs' prior experience affects the manner in which they operate their business and the extent to which it affects business performance is complex, and it has resulted in mixed findings. A number of studies have failed to support a positive relationship between entrepreneurial experience and entrepreneurial self-efficacy (Jo and Lee 1996; Lerner and Haber 2000; Sandberg and Hofer 1987), and some have actually found a negative effect (Van et al. 1984). Therefore, how entrepreneurs "actually learn from experience" rather than the experience per se influences entrepreneurial self-efficacy (Reuber and Fischer 1993). The actual type of experience gained may need to be considered, for example, in cases where previous entrepreneurial experience was unsuccessful, entrepreneurial experience actually has a negative influence on performance (Jo and Lee 1996).

2.2.3. Personality Traits

The search for the entrepreneurial personality has traditionally dominated psychology's effort to address the question of why some people but not others become entrepreneurs (Brandstätter 2011; Collins et al. 2004; Frese and Gielnik 2014; McClelland 1961; Rauch and Frese 2007; Zhao and Seibert 2006; Zhao et al. 2010).

In the trait approach, entrepreneurs are born, not made. Early efforts to model the entrepreneur as a function of traits focused on need for achievement, (Collins et al. 2004; McClelland 1961). More recent trait studies (e.g. Rauch and Frese 2007; Zhao and Seibert 2006) have focused on conscientiousness from the Big Five personality system (Costa and McCrae 1992), and generalized self-efficacy (GSE)—belief in one's capabilities to perform across situations (Judge et al. 1998).

Openness to experience encompasses creativity, receptiveness to new ideas and thinking out of the box (unconventionality). Entrepreneurs who are high in this, will be more receptive to the marketing, innovation, management, risk taking, financial Control. This open-mindedness can also lead to observation of mentor's behavior and values, which the potential entrepreneurs can emulate later. Conscientiousness includes being systematic, having a need for achievement and dependability. Hence a protégé high on conscientiousness would strive for excellence and would think for long term. Extraversion is associated with sociability, ambition, adventurousness and being expressive. Extravert persons would be able to express their thoughts clearly. They would be ambitious and would like adventures (e.g. establishing new organization). Agreeableness is associated with being cooperative,

care and concern for others, and flexible. One aspect which is important here is conflict resolution. Neuroticism is characterized by how people perceive the world around them. This trait is opposite to emotional stability. A neurotic person will be prone to negative feelings like anxiety, insecurity and hostility. ((Bozionelos 2004; Waters 2004; Sharma and Kanchan 2010)

Research on the outcome of entrepreneurial self-efficacy draws upon both social cognitive theory and the theory of planned behaviour (Ajzen 1991) to explain perceived behavioural control, entrepreneurial intention (Chen et al. 1998), start-up intention (Huyghe et al. 2016), action/behaviour, self-regulation (Shepherd et al. 2013) and regulatory focus (Cooper et al. 2016). The finding that high entrepreneurial self-efficacy individuals are more prone to identify opportunities in uncertainty using effectual logic (Engel et al. 2014) has been accepted as a corollary to entrepreneurial thinking style (Duening et al. 2012). Entrepreneurial self-efficacy significantly predicts entrepreneurial intentions of lower income women in India (Venugopal et al. 2015). Entrepreneurial self-efficacy has a positive impact on a venture's performance (Jain and Ali 2013). Basing their work in the Kutch region of Gujarat, India, Prajapati and Biswas (2011) concluded that entrepreneurial network, experience and education play a significant role in the subjective performance of micro and small enterprises. Bradley et al. (2011) surveyed necessity-motivated entrepreneurs of three developing nations and claimed that behavioural and social resourcefulness are the key drivers of entrepreneurial action in micro-credit industry.

Following is the brief description of a few identified consequents of entrepreneurial self-efficacy of grass-roots innovators.

2.3. Consequents of Entrepreneurial Self-Efficacy of Grass-roots Innovators:-

This section discusses consequents of entrepreneurial self-efficacy namely, effectual logic, and ingenuity and resourcefulness.

2.3.1. Effectual Logic

Entrepreneurial self-efficacy reflects the strengths of one's confidence in the ability to perform entrepreneurial-tasks (Bandura 1997; Chen et al. 1998). Importantly, even when lacking any prior experience, individuals may be highly confident (Camerer and Lovallo 1999; Townsend et al. 2010)

and entrepreneurial decisions are often attributed to such (over) confidence in ability (Hayward et al. 2006; Koellinger et al. 2007; Wu and Knott. 2006). These features position effectual logic as an important consequent of decision-making in general. Moreover, effectual logic stimulates empirical thinking and transmits the belief in the ability to directly shape the environment (Busenitz and Barney 1997; Wood and Bandura 1989). Hence, to the extent that effectual logic operates by playing down predictive information but in the same time utilizing proactiveness, agency, and control, entrepreneurial self-efficacy is a likely predictor (Sarasvathy and Dew 2008). Sarasvathy (2001) defines effectuation as the process of identification of ends with the means given while being focused on affordable losses and exploiting the contingencies. It connects with entrepreneurial self-efficacy of grass roots innovators because they primarily operate under uncertain circumstances and intend to predict their future through their self-efficacy. Such an improvisation attitude at the grassroots level prevalent in several parts of emerging economies like India is termed as Jugaad by researchers (Krishnan 2010; Rajdou et al. 2012). Effectual logic involves consideration of the given set of means, possible set of effects, constraints on such possible set of effects, and the selection criteria of the desired effect from the set of possible effects. Effectual logic is applied especially in situations where the future is highly uncertain and the precise nature or characteristics of the objectives are not known with any amount of certitude. These salient characteristics of the opportunity frame provide the theoretical justification linking it to both entrepreneurial self-efficacy and effectuation (Gartner et al. 2008; Krueger and Dickson 1994; Wiltbank et al. 2006). Therefore in this study, researcher has proposed to explore effectual logic as the possible consequent of entrepreneurial self-efficacy of grassroots innovators.

2.3.2. Ingenuity

Ingenuity is referred to as the ability to solve difficult problems and power of creative imagination. Under the situation of ambiguity, entrepreneur has to rely on personal ingenuity to discover and create the opportunity (Shane and Venkataraman, 2000; Dutta and Crossan, 2005; Carree and Thurik, 2010). Grass roots innovators harness local ingenuity directed towards local development.

Beliefs of personal efficacy shape whether people attend to the opportunities or to the impediments that their life circumstances present and how formidable the obstacles appear. People of high efficacy focus on the opportunities worth pursuing and view difficult obstacles as surmountable. (Krueger and Dickson, 1993, 1994). Therefore in this study, researcher has proposed to explore ingenuity as the possible consequent of entrepreneurial self-efficacy of grassroots innovators.

2.3.3 Resourcefulness

Resourcefulness refers to out of box thinking, generation of new ideas, an ability to visualize all possible ways to achieve the goal. Grass roots innovators boot strap and make the most of every resource available to them. Researchers use the term bricolage describing the entrepreneurial ability to make new combinations of resources available at hand (Baker and Nelsen 2005). The term resourcefulness is being used for describing entrepreneurs; however, its dimensions and measurement as research construct are not yet established in entrepreneurship literature.

According to Anitsal (2015), performances that call for ingenuity, resourcefulness, and adaptability depend more on adroit use of skills and specialized knowledge than on effort. Therefore, in the proposed study, researcher has made to explore resourcefulness as a consequent of entrepreneurial self-efficacy.

Some of the moderators of above variables are discussed below.

2.4. Moderators of Entrepreneurial self-efficacy of Grass-roots Innovators:-

This section discusses moderators of entrepreneurial self-efficacy namely, gender, family business background and formal education and training.

2.4.1. Gender

(Dempsey and Jennings 2014; Garcia and Moreno 2010; Wilson et al. 2009) indicate that females on average have lower levels of entrepreneurial self-efficacy than males, and that this may be attributed to less entrepreneurial experience and lower levels of affect towards entrepreneurship (Coleman and Kariv 2014), while other studies find no significant gender differences in entrepreneurial self-efficacy (Mueller and Dato-On 2008; Zhao et al. 2005). Other work has found that gender role stereotyping

negatively impacts women's Entrepreneurial Self-efficacy and subsequent intention to start a high-growth business (Sweida and Reichard 2013).

2.4.2. Family Business Background

The quality of entrepreneurial experience in a family business was found to be positively related to the entrepreneurial self-efficacy of family business successors, the length of work experience was not (Sardeshmukh and Corbett 2011). According to Fahed Sreih(2006), family business owner's 'entrepreneurial experience affects the business' corporate social responsibility, focusing specifically on support for community activities, as well as entrepreneurial self-efficacy of grass-roots innovators.

2.4.3 Formal education and training

The participation in entrepreneurial education and training programs enhances the entrepreneurial self-efficacy of postgraduate students, high school students (Sanchez 2013), undergraduate students (Gielnik et al. 2017; Egerová, and Czeglédi 2017) and the general population (Kerrick et al. 2016; Lee et al. 2016). Education and training also provides opportunities for vicarious learning through they observe the ingenuity and resourcefulness. (Kubberød and Pettersen 2017; Wilson et al. 2007; Zhao et al. 2005).

2.5. Identified Research Gaps

Most of the existing literature on individual entrepreneurial self-efficacy draws upon social cognitive theory (Bandura 1997) and the theory of planned behaviour (Ajzen 1991) to explain its antecedents and consequences. A much smaller body of research has explored firm-level and macro-level variables of entrepreneurial self-efficacy.

Following are unexplored research issues around the theme:-

The results of extant studies on experiential phenomenology as an important determinant are inconclusive. There is a need to comprehend drivers of short-term dynamics of entrepreneurial self-efficacy which have long term ramifications.

1. There is a paucity of studies specific to a developing country like India that focus on necessity-driven grass-roots entrepreneurs. Such studies will provide the necessary fillip to the development of an entrepreneurial culture.

2. The literature provides only a limited evidence for the linkages between self-efficacy of grass-roots innovators and their effectual logic, ingenuity and resourcefulness. The literature also provides only a conceptual level discussion of how these variables in turn affect intention for creating a business venture. There is a need to empirically validate the same.

SECTION III

3.1. Need of the Study

In recent years, growing influence of entrepreneurial thinking and acting on career development and vocational behaviour (Obschonka, Hakkarainen, Lonka, and Salmela-Aro 2017; Uy, Chan, Sam, Ho, and Chernyshenko 2015) has made the specific topic of entrepreneurial self-efficacy increasingly relevant to career researchers, educators and policy makers (World Economic Forum, 2009).

Grass-roots innovators are very inspiring individuals and there are many lessons that they can teach others. They have not got from researchers the attention that they deserve. Therefore, a comprehensive research that explores various constructs of entrepreneurial self-efficacy of grass-roots innovators in India is needed. Such study will not only contribute to the existing literature but will also provide policy inputs to complement current initiatives of the Government of India to create and nurture a matured ecosystem of entrepreneurial behaviour in the country.

3.2. Objectives of the Study:

1. To identify and evaluate the antecedents of entrepreneurial self-efficacy of grass-roots innovators in India.
2. To investigate the impact of entrepreneurial self-efficacy on the effectual logic, ingenuity and resourcefulness of grass-roots innovators in India.
3. To make recommendations to all relevant agencies (involved in nurturing and supporting grass-roots innovators in India).

3.3. Conceptual Framework

Entrepreneurial Self-efficacy has continued to experience potential growth of grass-roots innovators in intention building and venture creation. The conceptual framework of this study establishes the relationship between the antecedents of entrepreneurial self-efficacy of grass-roots

innovators- mentoring, entrepreneurial experience, and personality traits with entrepreneurial self-efficacy through its consequents - effectual logic and ingenuity and resourcefulness.

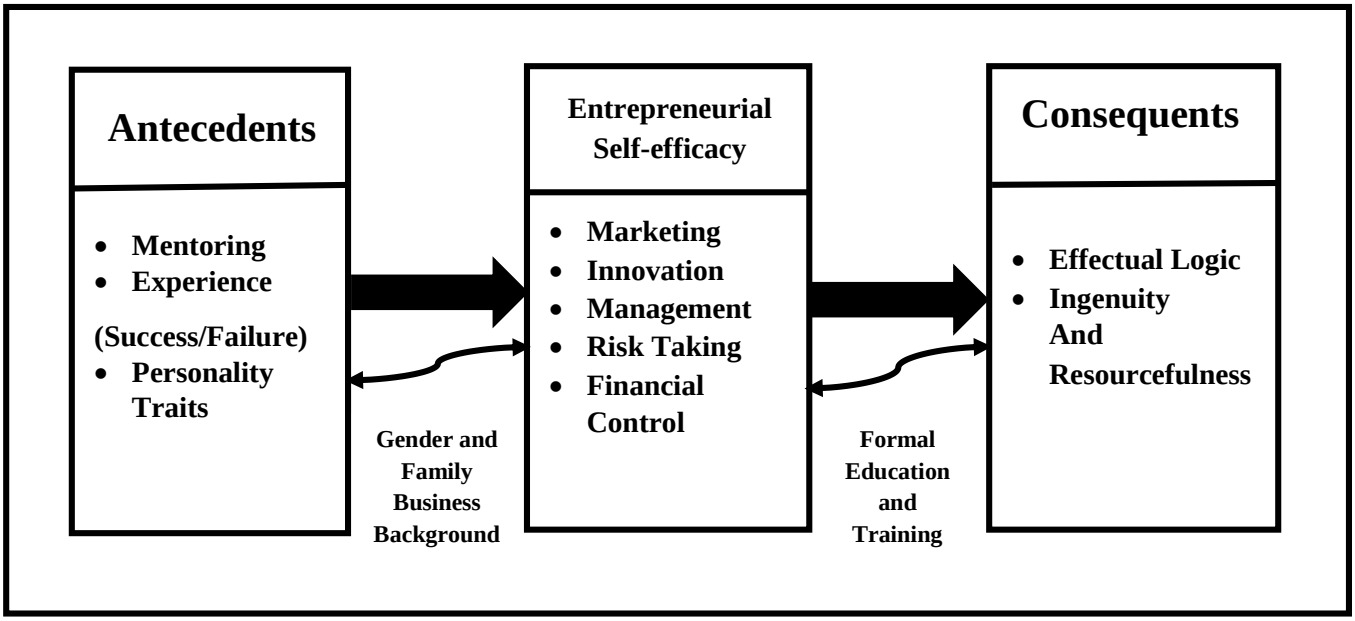

Figure 1: Conceptual Framework of the Study

(Source: Compiled by the researcher)

3.4. Definition of the Key Terms:

Mentoring: Mentoring is a special socialization process in which the protégé or novice is groomed by the experienced for superior performance or career advancement (Churchill et al. 1987).

Experience: This refers to prior experiences of starting-up or running an enterprise, extending to other work-related exposure in related or unrelated domains. It encompasses positive endowment like overcoming challenges successfully as well as negative or adverse results like failure in exploiting the opportunities.

Personality: Personality refers to individual differences in characteristic patterns of thinking, feeling and behaving. The study of personality focuses on two broad areas: One-it understands individual differences in particular personality characteristics, such as sociability or irritability. The other-it understands how the various parts of a person come together as a whole (APA, Encyclopedia of Psychology).

For the purpose of the study we take (Big 5) personality traits. The Big Five Inventory (BFI) was constructed in the late 1980s (John, Donahue and Kentle 1991). The framework consists of five factors: Conscientiousness, Extraversion, Openness to Experience, Agreeableness and Neuroticism (Wiggins and Trapnell 1997; Digman 1990).Conscientiousness consist of being systematic, having a need for achievement and dependability. Various sub-traits under this heading are trust, honest, dutifulness, competence and dependability. Extraversion consists of sociability, ambition, adventurousness and being expressive. Various sub-traits are warmth, gregariousness, dominance, excitement seeking, activity and positive emotions (Watson & Clark, 1997). Openness to experience covers creativity, receptiveness to new ideas and values, and thinking-out-of-the-box. (McCrea and Costa, 1997). These individuals have wide range of interests and are even able to reconsider their values, if needed. Sub-traits under this trait are: openness to values, ideas, experiences, food and fantasy. Agreeableness is associated with being cooperative, care and concern for others, and flexible. Neuroticism is characterized by how people perceive the world around them (Kanchan 2010).

Entrepreneurial Self- Efficacy: It is an individuals' cognitive estimate of their capabilities to mobilize motivation, cognitive resources and course of action needed to exercise control over events in their lives. To be specific, it is belief about one's own ability. Entrepreneurs must have the belief that they are capable of starting their business in all circumstances. Entrepreneurial self- efficacy has five components namely, marketing, innovation, management, risk taking and financial control (Chen et al. 1998).

Effectual Logic: Effectuation is defined as an approach used by expert entrepreneurs to solve problems in highly uncertain market environments. Effectual logic is understood as a 'type of reasoning used' by expert entrepreneurs to explore economic opportunity. Essentially, effectual logic relates to the way entrepreneurs think about and pursue economic opportunity (Duening et al. 2012).

Ingenuity and Resourcefulness: Organizational ingenuity is 'the ability to create innovative solutions within structural constraints using limited resources and imaginative problem solving' (Lampel et al. 2014). Ingenuity is the ability to solve difficult problems, often in original, clever and inventive ways. Resourcefulness is defined as patterned variations in making use of limited resources

(Powell and Baker 2011) or entrepreneurial adaptation to cope with difficult situations, or unusual problems.

3.5. Proposed Research Questions

This proposed research aims to address following research questions:

1. What are the relevant variables that affect the entrepreneurial self-efficacy of grass-roots innovators in India?
2. How entrepreneurial self-efficacy of grass-roots innovators influences their effectual logic, ingenuity and resourcefulness?
3. How family business background, prior entrepreneurial education and training and gender etc. moderate the relationship between the identified variables and entrepreneurial self-efficacy of grass-roots innovators?

3.6. Proposed Hypotheses

Based on an extensive review of the relevant literature, the researcher had some hunches which led to the following research/experimental hypotheses as tentative answers to the research questions stated above. These research hypotheses will be tested as an attempt to explore the possible relationships proposed in the conceptual framework of the study.

H_1: Mentoring affects entrepreneurial self-efficacy of grass-roots innovators.

H_2: Entrepreneurial experience (success or failure) affects entrepreneurial self-efficacy of grass-roots innovators.

$H_{3:}$ Personality traits (Big 5) affect entrepreneurial self-efficacy of grass-roots innovators.

$H_{3\,(a):}$ Openness to experience affects entrepreneurial self-efficacy of grass-roots innovators.

$H_{3\,(b):}$ Conscientiousness affects entrepreneurial self-efficacy of grass-roots innovators.

$H_{3\,(c):}$ Extroversion affects entrepreneurial self-efficacy of grass-roots innovators.

$H_{3\,(d):}$ Agreeableness affects entrepreneurial self-efficacy of grass-roots innovators.

$H_{3\,(e):}$ Neuroticism affects entrepreneurial self-efficacy of grass-roots innovators.

H_4: Entrepreneurial self-efficacy of grass-roots innovators affects their effectual logic.

H_5: Entrepreneurial self-efficacy of grass-roots innovators affects their ingenuity and resourcefulness.

H_6: Gender affects the relationship between entrepreneurs experience and entrepreneurial self-efficacy of grass-roots innovators.

H_7: Family business background affects the relationship between entrepreneurial experience and entrepreneurial self-efficacy of grass-roots innovators.

H_8: Formal entrepreneurial education and training affects the relationship between effectual logic and entrepreneurial self-efficacy of grass-roots innovators.

H_9: Formal entrepreneurial education and training affects the relationship between ingenuity and entrepreneurial self-efficacy of grass-roots innovators.

H_{10}: Formal entrepreneurial education and training affects the relationship between resourcefulness and entrepreneurial self-efficacy of grass-roots innovators.

SECTION IV

4.1. Scope of the Study

Keeping the availability and accessibility of the sample unit the area of the survey has been identified as Northern and Western region of India.

4.2. Instruments/ Techniques to be used

The proposed study will be based on multi-methods: (i) a questionnaire-based quantitative survey and (ii) structured interviews and case-based methods to obtain qualitative measures. Questionnaire survey will use appropriately developed/ adapted/ adopted scales. The research investigator will develop inventories for the unexplored variables (effectual logic, ingenuity and resourcefulness).The case study will be conducted to support and cover evidence of the proposed hypothesis.

4.3. Statistical Measurements

Relevant statistical measurements like reliability coefficient Cronbach's alpha, ANOVA, Correlation and Regression Analysis, t-test and other descriptive statistics will be used.

4.4. Sampling

4.4.1. Sample composition

Scope of the study will be Northern and Western region of India. Sample composition will consist of (i) grass-roots innovators (possible source can be relevant government agencies and NGOs) and (ii)

potential entrepreneurs (students who are being trained and have shown interest in perusing entrepreneurship). Potential entrepreneurs will include students being trained and mentored for entrepreneurial pursuits as a part of various entrepreneurial initiatives. Many institutions of higher education in India train and mentor students for entrepreneurship under various skilling initiatives and Bachelor of Vocation (B.Voc.) programs. These students can be termed as novices. Using students as potential entrepreneurs for exploring various entrepreneurship models is a common practice in entrepreneurship research that investigates entrepreneurial self-efficacy, mentoring, and entrepreneurial intention (Li and Dandan 2019; Souitaris and Zerbinati 2007; Souitaris et al. 2007; Wilson et al. 2007; O'Connor 2013; Rauch and Hulsink 2015; Siegel and Wright 2015; Sánchez and Sahuquillo 2018; Fiore et al. 2019). Including students as potential entrepreneurs for the proposed study will enable the researcher to study the process of entrepreneurial behaviour and will provide greater extent of generalisation. By involving students (as novices) as well as actual entrepreneurs, researcher will have the opportunity to show differences in thinking and decision making processes of the two groups.

4.4.2. Sampling Techniques

Sampling technique will be judgment and convenience based. The proposed study is generic in nature. However, while choosing samples of innovators, researcher would like to make sure that there is an appropriate representation of grass-roots innovators and potential entrepreneurs in the study.

4.4.3. Sample Size Formula for Infinite Population:-

The following sample size formula for infinite population is used to arrive at a representative number of respondents. (Bill Godden, 2004):

$$n = \frac{\mathrm{Z}^2 \times p(1-p)}{M^2}$$

Where:

n = Sample Size for infinite population

Z = Z value

P = population proportion (expressed as decimal)

M = Margin of Error

In order to minimize the bias and obtain realistic sample size, sample size is evaluated as- Estimating 50% of population with 5% Margin of Error

Population scenario	Z value at 95% confidence level	Margin of error	Sample size calculation	Sample size
50%	1.96	5%	$(1.96)^2*0.5(1-0.5)/0.05^2$	384.16
				Estimated sample size = 384

Through the above sample formula, the sample size is 384. However, it is to be noted that this large sample size may have high non sampling error. Therefore, to counter balance, the proposed sample size for the study will be **300**.This is also aligned with sampling in corresponding studies that are of similar nature.

4.4.4. Significance (Implications) of the Proposed Study

Contribution to Entrepreneurship Literature

The key constructs introduced at the outcome side of the proposed conceptual framework, viz effectual logic and ingenuity and resourcefulness have not been empirically validated by researchers. These two constructs have been discussed in conceptual articles and have profoundly been connected with frugal/grass-roots/jugaad innovators. The proposed comprehensive framework and its empirical validation is the path breaking contribution to entrepreneurial theory and practice.

Implications for Policy Makers

Grass-roots innovators are very inspiring individuals and there are many lessons that they can teach others. They have not got from researchers the attention that they deserve. Guided effective policies can positively exploit the influence of entrepreneurial start-ups on job creation. Directed efforts towards increasing entrepreneurial self-efficacy of grass-roots innovators will complement current initiatives of the Government of India to create and nurture a matured ecosystem of entrepreneurial behaviour in the country.

Implications for Society

In order to supplement various government initiatives to enhance entrepreneurship as a viable career option among young generation, this study aims at understanding various facets of entrepreneurial self- efficacy of grass-roots innovators who use traditional knowledge, innovate and create their ventures without any support from the formal sector. These innovators not only contribute towards growth of the economy by creating ventures, but also make a huge social impact. There are millions of job seekers in India and research impediments towards enhancing self-efficacy of such entrepreneurs will enhance their personal capability. This motivates their entrepreneurial behaviors and enables them to overcome difficulties. These behaviors include opportunity recognition, marshalling of resources and improving performance of new businesses. Grass-roots innovators are necessity motivated entrepreneurs and they start creating value not only becoming self-employed but also by employing others. Therefore, the proposed research has a very relevant social insight.

Section – V

PROPOSED CHAPTERIZATION

The thesis will contain the following chapters:

Chapter 1 – Introduction

Chapter 2 – Review of Literature

Chapter 3 – Conceptual Framework, Research Design and Methodology

Chapter 4 –Data Collection and Analysis

Chapter 5 – Results and Interpretations

Chapter 6 – Conclusions, Managerial Implications and Direction for Future Research

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SECTION VI

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